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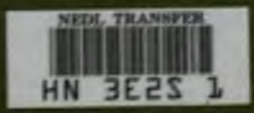

WILD BIRDS
IN
CITY PARKS

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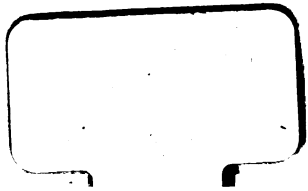

Wild Birds in City Parks

Being hints on identifying 145 birds, prepared primarily for the spring migration in Lincoln Park, Chicago

BY

Herbert Eugene Walter

AND

Alice Hall Walter

REVISED AND ENLARGED EDITION

WITH CHART AND KEY

CHICAGO
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Note to Third Edition.

With the continued success of this little booklet the authors have been led to revise and enlarge the present issue in the hope that it will prove more helpful and complete to those beginning the outdoor study of birds.

The new features of this edition are the addition of forty-five birds—the majority of which are shore and water birds—and a simple field key. The number of each bird as given in the check-list of the American Ornithologist's Union has also been inserted after its scientific name as an aid in referring to larger bird-books. The subject matter has been carefully rewritten and the order of the birds rearranged in accordance with data covering observations during the last seven years, as well as the charts which show the relative abundance of the birds and the height of the migration in Lincoln Park.

We wish to thank our friends for their kind support in furthering our efforts to enlarge the circle of admirers which the wild birds so richly deserve.

"All nature is so full that that district produces the greatest variety which is most examined."

—*Gilbert White, 1768.*

Preface.

The object of this little book is to furnish those who may be interested in making the acquaintance of wild birds with a simple letter of introduction to 145 birds, the majority of which are commonly seen during the spring migration.

Complete descriptions have been avoided, in the belief that the student should rely upon his own observation for the discovery of minor details. *The living bird* is the one important fact which will make the brief hints offered of value.

Anyone caring to make use of these hints may be assured that during the migrations of the birds city dwellers have one of the keenest delights of country life brought to their very doors, because many birds, migrating largely at night, are attracted by the lights of the city and stop off in their long journey to feed, so that a city park often contains a greater variety of feathered visitors than an equal area in the country.

We wish to remind those of our friends who have asked for pictures in a future edition that this book actually is *copiously illustrated* by hundreds of living birds every springtime in our parks and around our homes, illustrations that are all life size, absolutely accurate in detail and colored true to nature.

"As for the birds * * * they add immeasurably to the wholesome beauty of life."

—*Theodore Roosevelt, in Bird Lore, Vol. II, p. 98.*

General Hints.

"A good observer is quick to take a hint and follow it up."—*John Burroughs.*

The identification of birds depends quite as much upon accurate observation of their size, motions, flight, characteristic attitudes, manner of feeding, company, song, call-notes and haunts, as upon details of form and color. Especial care is necessary to insure correct estimates of size for the reason that living birds often appear smaller to the unpracticed eye than they actually are. The familiar *English Sparrow* is a convenient standard of size because it is usually at hand in our city parks for instant reference. Remembering that it is *6 inches long* a practical though rough division of wild birds may be made as follows:—

1. Birds smaller than the *English Sparrow.*
2. Birds about the size of the *English Sparrow.*
3. Birds decidedly larger than the *English Sparrow.*

If a few general characteristics of the principal bird-families be kept in mind, and these are quickly and almost unconsciously

learned, the identity of a strange bird may usually be narrowed down to a few possibilities. For example:

Woodpeckers climb up and down the trunks of trees bracing with their tails and tapping the bark vigorously;

Nuthatches are smaller than woodpeckers and have much the same habit of climbing up and down tree-trunks but with a freer wig-wagging motion, often descending head downward;

Flycatchers sit erect with drooping tails, watching alertly for insect prey upon which they pounce in mid-air, afterwards returning to their perch;

Swallows skim through the air in graceful and long sustained flights;

Sparrows have stout seed-cracking bills, feed upon the ground, seldom fly high or far at a time and are for the most part fine songsters;

Warblers are tiny, tireless, gaily-colored explorers of the twigs of trees and bushes;

Kinglets are smaller than warblers and quite as restless in their motions, but arrive earlier in the migration;

Wrens, with tails erect, slip mouse-like about brush heaps, crevices and bushes, though often perching in sight while singing;

Thrushes, who with the exception of the *Robin* and *Bluebird* are very plainly dressed, run about on the ground stopping suddenly in a listening attitude. When singing they fly up to some perch, although many of the unrivaled singers of this family are silent during their brief sojourn in city parks;

Vireos are most at home on the boughs of trees and sing freely as they glide in and out among the leaves to feed.

Female birds can usually be identified after the adult males have been seen, although the females and young of many species are obscurely marked or quite different from the adult males, a fact especially true of the warblers. Immature birds are not considered in the present scheme of study since they are a source of confusion to the beginner and occur in any considerable number only during the fall migration.

The time of arrival, that is, when a bird may be expected during the migration, is a point worthy of particular attention. Many wild guesses may be avoided by simply noticing the dates when a bird has been known to arrive in any given locality from year to year.

As a rule birds are identified by the method of elimination. Suppose, for example, a small bird of lively motions is seen feeding among the twigs of a tree late in March. It is, of course, neither a warbler nor a vireo for these birds, although active and frequenting trees, arrive much later in the spring. Provided it does not brace its tail and climb up and around the trunk of the tree it is not likely to be a woodpecker, because the motions of woodpeckers are too characteristic to be mistaken. In similar manner, although sparrows and juncos may have arrived, it is probably neither of these since it does not feed upon the ground, while its size precludes the possibility of its being any bird larger than the *English Sparrow*. There are only a few birds therefore, which it might be and close observation together with the aid of a few leading hints, will usually settle the question. In any case *watch the bird* for it is better to look at the bird than at a printed description of it.

The safest way, however, is to make careful notes about a stranger on the spot. Memory is never more treacherous than in the case of the description of a doubtful bird when one appeals to some book of reference, a museum collection or the judgment of others. It is not advisable to attempt extensive "field-notes" at first but it is essential to keep a daily, dated list of all identified birds. A blank chart for this purpose is inserted in the back part of the book.

Never *chase* birds. Have patience, stand still a great deal and use your common sense all the time.

Do not make yourself believe that you see a certain bird

because it has been reported by others. Do your own looking and listening and do it well.

If you cannot go birding alone take along as few friends as possible because birds are suspicious of human beings in flocks, especially when they talk much.

A pair of field or opera-glasses is an invaluable aid, although practice is necessary in learning to adjust them rapidly and to fix them instantly upon the bird. Do not feel obliged to use the glasses when you are near enough to see well without them.

Keep the sun at your back, otherwise colors will deceive you.

Remember that birds do not stay "indoors" on account of rain, clouds or unfavorable weather. Warm spring rains literally fill the parks with feathered travelers who often tarry but a day.

Particular Hints.

NOTE:—The following one hundred and fourteen birds are arranged in the order of their *average first appearance in Lincoln Park*, based upon observations made during the last seven years.

For the convenience of those desiring access to reliable sources of information, the scientific name of each bird is placed in parenthesis below its common name, followed by its number in the official list of the American Ornithologist's Union.

Following the hints given about each bird are the names (in **black faced type**) of any bird or birds for which it might easily be mistaken.

1. BLUE JAY. 11½ in.

(Cyanocitta cristata. 477.)

Black collar; *crested;* wings and tail deep blue, white-tipped and black-barred; bold; harsh, noisy call-note; stays the year around in Lincoln Park. **Loggerhead Shrike. Kingfisher. Bluebird.**

2. LOGGERHEAD SHRIKE. 9 in.

(Lanius ludovicianus. 622.)

Slaty-gray; commonly white beneath, *not marked with dark transverse lines;* wings and tail black, marked with white; *hooked* bill; bar through the eye and *over forehead,* black; imitates notes of other birds. **Blue Jay.**

3. ROBIN. 10 in.

(Merula migratoria. 761.)

Dark slate colour; black head; yellow bill; throat white streaked with black; underparts bright chestnut red; sings "cheer-i-ly, cheer-i-ly, cheer-up;" nests in Lincoln Park. **Towhee.**

4. JUNCO. 6¼ in.

(Junco hiemalis. 567.)

Slate color; blackish bib (female brownish) over a white belly; *ivory bill, two white tail-feathers;* feeds in flocks on ground, often in company with other birds; "sucks its teeth" for a call-note; song, a melodious trill.

5. MEADOWLARK. 10½ in.

(Sturnella magna. 501.)

Streaked; black crescent on a *bright yellow* breast; *outer tail-feathers white;* flies straight, *hovering* as it reaches the ground; noteworthy song. **Flicker. Dickcissel.**

6. CROW. 19 in.

(Corvus americanus. 488.)

Entirely black, including bill and feet; often seen in flocks; wings appear frayed and ragged in flight; note, a lusty "caw." **Bronzed Grackle.**

7. BLUEBIRD. 6½ in.

(Sialia sialis. 766.)

Sky-blue; brownish-red below; usually in pairs; sometimes nests in Lincoln Park; call, "pu-ri-ty, pu-ri-ty;" often heard before seen. **Blue Jay.**

8. SAVANNA SPARROW. 5¼ in.

(Passerculus sandwichensis savanna. 542a.)

Much streaked above and below; line over eye and edge of wing, yellowish; cheek sometimes suffused with yellow tinge; *tail short,* feathers pointed; movements stealthy; song, a weak trill. **Henslow Sparrow.**

9. BRONZED GRACKLE. 13 in.

(Quiscalus quiscula æneus. 511b.)

Iridescent black; *body* distinctly bronzy; often carries its tail rudderwise in flight; pompous walk; rusty, grating call; nests in Lincoln Park. **Crow.**

10. SONG-SPARROW. 6½ in.

(Melospiza cinerea melodia. 581.)

Reddish-brown, showing black streaks; *ashy* line over eye; whitish below with dark-brown streaks which form a *spot in the middle of the breast;* noteworthy song. **Swamp Sparrow. Lincoln Sparrow.**

11. COWBIRD. 8 in.

(Molothrus ater. 495.)

Male black with glossy brown head and neck; sparrow-like bill; female brownish; fly in large flocks, uttering a greasy, squeaking note. **Bronzed Grackle. Rusty Blackbird.**

12. TREE SPARROW. 6¼ in.

(Spizella monticola. 559.)

Streaked; shows much grayish; two *showy white wing-bars;* chestnut-brown cap; breast whitish, *shading to a dark spot in the middle;* in flocks, often with *Juncos;* returns north early in the season; noteworthy song. **Chipping Sparrow. Field Sparrow.**

13. FOX SPARROW. 7½ in.

(Passarella iliaca. 585.)

Fox-red back and tail; ashy about neck and head; white breast *thickly* streaked with dark spots; scratches like a hen; alert; noteworthy song. **Brown Thrasher. Hermit Thrush.**

14. PHOEBE. 7 in.

(Sayornis phœbe. 456.)

Dull olive-brown; darker on head and tail; whitish below; *bill* and feet black; tail drooping but jerking constantly; note, "phœ'-be." **Wood Pewee. Least Flycatcher.**

15. TOWHEE. 8¾ in.

(Pipilo erythrophthalmus. 587.)

Black above and black bib (female rich brown); reddish-brown sides; white underneath; *outer tail-feathers white;* scratches about under bushes; brilliant notes, "tow-hee'" and "che-wink'." **Robin.**

16. DOWNY WOODPECKER. 6¼ in.

(Dryobates pubescens medianus. 394c.)

Bill small; closely resembles the *Hairy Woodpecker* but is *scarcely larger* than the *English Sparrow* and has the outer tail-feathers *barred with black.* **Hairy Woodpecker. Yellow-bellied Sapsucker.**

17. GOLDEN-CROWNED KINGLET. 4 in.

(Regulus satrapa. 748.)

Olivaceous; two whitish wing-bars; *orange-yellow stripe edged with black on crown;* restless and fearless; often seen feeding in evergreens; note, rapid "tzee, tzee, tzee." **Ruby-Crowned Kinglet.**

18. FLICKER. 12½ in.

(Colaptes auratus luteus. 412a.)

Brown, barred with black; head grayish; back of neck marked with bright red; black crescent on cinnamon-brown spotted breast; in flight shows *white rump* and yellow lining of wings and tail; feeds much on ground, unlike other woodpeckers; call-note, "flee'-ker." **Meadowlark.**

19. BROWN CREEPER. 5½ in.

(Certhia familiaris americana. 726.)

Brown finely streaked with white; silky white below; long curved bill; *flies to the base of tree-trunks and works up in spirals* bracing with its long pointed tail-feathers; calls softly, "screep, screep." **Nuthatches.**

20. CHICKADEE. 5¼ in.

(Parus atricapillus. 735.)

Ashy-gray; black throat and *cap;* white cheeks; frowsy; lively; often swings head downward from the tips of twigs; song, "chick-a-dee-dee"; call-note musical, "pewee," sometimes confused with note of *Phœbe.*

21. WHITE-BREASTED NUTHATCH. 5¾ in.

(Sitta carolinensis. 727.)

Ashy-blue; cap and back of the neck, black; white below; constantly exploring the bark of trees but does not brace, woodpecker fashion, with its tail-feathers; note, nasal "yank, yank, yank." **Red-breasted Nuthatch. Brown Creeper.**

22. BELTED KINGFISHER. 14 in.

(Ceryle alcyon. 390.)

Blue-gray; white collar; *big, crested head;* sits erect watching for fish and flies near the surface of the water, uttering a *rattling* call; summers in Lincoln Park.

23. YELLOW-BELLIED SAPSUCKER. 8¼ in.

(Sphyrapicus varius. 402.)

Mixed black and white; *yellowish-white underneath;* streaked on sides; white bar *lengthwise* the wing; scarlet patch, bordered with black on crown *and throat* (female with throat white); harsh, squealing note. **Downy Woodpecker. Hairy Woodpecker.**

24. RUSTY BLACKBIRD. 9½ in.

(Scolecophagus carolinus. 509.)

Black, uniformly iridescent and more or less rusty; tail almost even; female smaller and rustier with pale line over eye. **Bronzed Grackle. Red-wing Blackbird.**

25. FIELD SPARROW. 5¾ in.

(Spizella pusilla. 563.)

Streaked; crown and *bill* reddish-brown; neck ashy; brownish-white *unspotted* breast; two indistinct white wing bars; song, "fe-u, fe-u, fu, fee, fee, fee," beginning slowly and ending almost in a trill. **Chipping Sparrow. Tree Sparrow.**

26. HERMIT THRUSH. 7¼ in.

(Hylocichla guttata pallasii. 759b.)

Olive-brown; *tail reddish-brown;* below dull white tinged with buff and thickly spotted across the breast; shy, hiding in bushes; famous for its song but silent during migration. **Other Thrushes.**

27. RED-WINGED BLACKBIRD. 9¼ in.

(Agelaius phœniceus. 498.)

Black; scarlet shoulder-straps edged with yellow; female much streaked, marked with rusty; likes marshy places; note, "quonk-a-ree'." **Cowbird. Rusty Blackbird.**

28. RUBY-CROWNED KINGLET. 4¼ in.

(Regulus calendula. 749.)

Dark greenish-olive; light underneath; ring about eye and wing-bars white; male shows at will a brilliant ruby crown-patch; remarkable song. **Golden-crowned Kinglet. Warblers.**

29. HAIRY WOODPECKER. 9 in.

(Dryobates villosus. 393.)

White band down the middle of black back; wings black spotted with white; beneath white; outer tail-feathers white *not barred;* red band on neck of male; large bill; note, sharp resonant "plick." **Downy Woodpecker. Yellow-bellied Sapsucker.**

30. TREE SWALLOW. 6¼ in.

(Iridoprocne bicolor. 614.)

Metallic blue-green; *shining white below;* tail appears nearly square at end in flight; often seen skimming near the surface of still water. **Barn Swallow. Purple Martin.**

31. CARDINAL. 8½ in.

(Cardinalis cardinalis. 593.)

Bright red, including large blunt bill; *crested;* black markings on face and throat; female olive-gray, tinged lightly with red and obscurely marked; fine songster. **Tanagers.**

32. WHITE-THROATED SPARROW. 7 in.

(Zonotrichia albicollis. 558.)

White throat; unmarked ashy breast; whitish on belly; crown striped with black and white; broad white stripe over the eye shading to yellow in front; in flocks about shrubbery; clear, sweet whistle, "pee-bod-dee-dee-dee." **White-crowned Sparrow.**

33. MARSH HAWK. 22 in.

(Circus hudsonius. 331.)

Bluish gray, showing light streaks; gray below, belly white marked with brown; tail barred; *white rump patch;* female brown, barred and streaked more heavily; note shrill.

34. CHIPPING SPARROW. 5¾ in.

(Spizella socialis. 560.)

Streaked; *plain ashy breast;* two faint white wing-bars; *chestnut-brown cap;* whitish line over eye; song, a strong clear trill. **Field Sparrow. Tree Sparrow.**

35. MOURNING DOVE. 12 in.

(Zenaidura macroura. 316.)

Gray-blue, tinged with brownish; tail broadly tipped with white, *tapering to a narrow point;* sides of neck iridescent; marked with black on wings and sides of head; rapid whistling flight; note, "coo-oo." **Pigeon. Cuckoos.**

36. WINTER WREN. 4¼ in.

(Olbiorchilus hiemalis. 722.)

Dark tawny-brown, barred on wings and tail; lighter below, barred posteriorly; pale line over eye; *stub tail, carried erect;* very fine song. **Other Wrens.**

37. VESPER SPARROW. 6¼ in.

(Poœcetes gramineus. 540.)

Streaked above and below; underparts whitish, tinged with buff across breast and on sides; shows *two conspicuous white tail feathers in flight;* noteworthy song. **Female Purple Finch.**

38. MYRTLE WARBLER. 5½ in.

(Dendroica coronata. 655.)

Blue-gray, streaked; crown, *rump* and spot on each side of breast, *yellow;* white below, marked on breast and sides with black; usually in small flocks. **Magnolia Warbler.**

39. SWAMP SPARROW. 5¾ in.

(Melospiza georgiana. 584.)

Very darkly colored and heavily streaked; chestnut cap, sometimes indistinctly streaked; *black forehead*; plain ashy breast; shy; frequents bushes along the water's edge. **Song Sparrow. Lincoln Sparrow.**

40. PURPLE FINCH. 6¼ in.

(Carpodacus purpureus. 517.)

Not "purple," but faded crimson-red, somewhat streaky; belly whitish; *large, heavy bill;* female mottled olive-brown, resembling sparrows; noteworthy song.

41. CEDAR WAXWING. 7 in.

(Ampelis cedrorum. 619.)

Smooth snuff-brown; *crested;* chin and line from bill to crest, black; end of tail banded with yellow; in flocks; "monotonous lisping note."

42. WILSON THRUSH. 7¼ in.

(Hylocichla fuscescens. 756.)

Uniform tawny brown; no ring about the eye; below white, faintly tinged and lightly spotted; shy, about bushes; sometimes sings in Lincoln Park. **Other Thrushes.**

43. AMERICAN SPARROW HAWK. 10½ in.

(Falco sparverius. 360.)

Reddish-brown, usually barred or spotted with black; head bluish, *marked on sides with black;* tail white-tipped with one broad black bar; below white, more or less spotted; narrow pointed wings; female, much more barred, darker and *streaked* below. *The smallest hawk.*

44. BARN SWALLOW. 7 in.

(Hirundo erythrogastra. 613.)

Blue-back; chestnut shading to white below; *deeply forked tail.* **Tree Swallow.**

45. BROWN THRASHER. 11¼ in.

(Toxostoma rufum. 705.)

Bright rusty red; white below, much streaked; long bill and *long, sweeping tail;* song, loud, bold and varied; about bushes. **Fox Sparrow.**

46. HOUSE WREN. 5 in.

(Troglodytes aedon. 721.)

Brown, barred with darker; below grayish, tinged with brown, also barred; rusty-colored tail, *two inches long;* remarkable song. **Other Wrens.**

47. BLUE-GRAY GNATCATCHER. 5 in.

(Polioptila cærulea. 751.)

Blue-gray; white beneath; *long tail* edged with white; male has a black line over eye; fidgety, never long in a place; wheezy song. **Black-throated Blue Warbler. Cerulean Warbler.**

48. WHITE-CROWNED SPARROW. 7 in.

(Zonotrichia leucophrys. 554.)

Ashy-gray; rump, tail and wings, brown, streaked with black; *crown conspicuously striped* with black and white; no yellow; two white wing-bars; in flocks, often with *White-throated Sparrows;* scratches with both feet; notice the song. **White-throated Sparrow.**

49. PALM WARBLER. 5 in.

(Dendroica palmarum. 672.)

Streaky olive-gray; *chestnut cap;* yellow line over eye; beneath yellowish (brightest on throat and under tail) streaked with brown; feeds on ground in flocks; constantly *tilts its tail* up and down. **Water-Thrushes.**

50. HENSLOW SPARROW. 5 in.

(Coterniculus henslowii. 547.)

Back conspicuously marked and streaked, showing much chestnut; head and neck a peculiar greenish tinge, *finely* lined with black; below tinged with buff and finely streaked; dark stripes and spots on sides of head; *sharp tail;* hides in the grass and can be carefully observed only with patience.

51. GRINNELL WATER-THRUSH. 5¾ in.

(Seiurus noveboracensis notabilis. 675a.)

Very dark olive-brown; below yellowish white, thickly streaked; *pale stripe* over the eye; skulks along the very edge of the water; *tilts its tail;* brilliant song. **Louisiana Water-Thrush. Oven Bird. Palm Warbler.**

52. CATBIRD. 8¾ in.

(Galeoscoptes carolinensis. 704.)

Slate-gray; bill, crown and tail, black; chestnut patch under tail; about shrubbery; willing to be looked at; calls like a cat; song, greatly varied.

53. PINE WARBLER. 5¾ in.

(Dendroica vigorsii. 671.)

Olive-green; yellow breast; sides of head suffused with yellowish—sometimes forming a *yellow line over eye;* two dull white wing-bars; song, a loud, penetrating trill. **Yellow-bellied Flycatcher. Female Western Yellow-throat. Female Wilson Black-cap.**

54. RED-BREASTED NUTHATCH. 4¾ in.

(Sitta canadensis. 728.)

Bluish-gray; crown and *stripe through eye, black,* with a white line over the eye; *below rusty-red,* throat white; climbs up and down and around trees; note, "cark, cark, cark." **White-breasted Nuthatch.**

55. BLACK AND WHITE CREEPER. 5¼ in.

(Mniotilta varia. 636.)

Black and white, *striped;* white belly; female shows more white below; creeps up and down trees like the *Nuthatches;* song rapid and rasping, "he'-ho, he'-ho, he'-ho." **Blackpoll Warbler.**

56. BLACK-THROATED GREEN WARBLER. 5¼ in.

(Dendroica virens. 667.)

Olive-green; *bright yellow cheeks; throat and upper part of breast, black;* white wing-bars; song, repeated often and rapidly, "chee, chee, chee, chee, char, chee." **Cape May Warbler Hooded Warbler.**

57. RED-HEADED WOODPECKER. 9½ in.

(Melanerpes erythrocephalus. 406)

Black and white, not streaked; *entire head, neck and upper part of breast, crimson;* pure white belly; note, a loud "kr-r-r-r r." **Red-bellied Woodpecker.**

58. MOCKINGBIRD. 10 in.

(Mimus polyglottus. 703.)

Ashy-gray, wings and tail darker; whitish below; wing shows white patch; outer tail-feathers white; famous for its song. **Loggerhead Shrike. Cuckoos. Catbird.**

59. CHIMNEY SWIFT. 5¼ in.

(Chætura pelagica. 423.)

Dark sooty-gray; *bob-tail;* long, pointed wings, which often vibrate rapidly in flight; twittering note; never seen perching like other birds. **Swallows.**

60. OLIVE-BACKED THRUSH. 7¼ in.

(Hylocichla ustulata. 758a.)

Uniform dark olive; below white, darker on sides; cheeks, throat, breast and ring about eye, buff; spotted on breast; noteworthy song. **Gray-cheeked Thrush. Hermit Thrush. Wilson Thrush.**

61. GREAT-CRESTED FLYCATCHER. 9 in.

(Myiarchus crinitus. 452.)

Olive, showing rusty brown on wings and tail; *crested head;* throat and breast, ashy-gray; wing-bars; belly sulphur-yellow; usually perches high; note, "loud whistle." **Blue Jay.**

62. LOUISIANA WATER-THRUSH. 6¼ in.

(Seiurus motacilla. 676.)

Olive; white below, buff-tinged posteriorly and streaked, but not thickly, with dusky; *throat and middle of belly, unmarked; white* line over eye; loud, ringing song. **Grinnell Water-Thrush. Ovenbird. Palm Warbler.**

63. LEAST FLYCATCHER. 5¼ in.

(Empidonax minimus. 467.)

Olive-gray; wings, tail and head, darker; two narrow wing-bars; decidedly grayish below, whiter on throat; *jerks its tail* and utters a sharp, energetic call, "che-bec'." **Wood Pewee. Phoebe.**

64. WOOD THRUSH. 7¾ in.

(Hylocichla mustelina. 755.)

Bright brown on head shading to olive-brown on rump and tail; white beneath, with conspicuous *round* spots except on throat and middle of belly; remarkable song. **Other Thrushes. Fox Sparrow.**

65. WESTERN YELLOW-THROAT. 5¼ in.

(Geothlypis trichas occidentalis. 681a.)

Olive-green, showing brownish tinge; *broad, black stripe across forehead and through eye;* bordered broadly with white; yellow beneath; *female* duller and without black stripe and easily confused with female *Mourning, Connecticut and Pine Warblers;* in low bushes; song, "witch-i-ty, witch-i-ty, witch-i-ty."

66. MAGNOLIA WARBLER. 5 in.

(Dendroica maculosa. 657.)

Back and tail, black; crown blue-gray; yellow rump; *yellow* below, streaked with black on breast and sides; white patch on wings; broad white band across tail, seen from below. **Myrtle Warbler. Cape May Warbler.**

67. AMERICAN GOLDFINCH. 5¼ in.

(Astragalinus tristis. 529.)

Canary-yellow, with black crown, tail and wings; white wing-bars; female olive-tinged, without pure black or yellow; in flocks; canary-like song; also sings in its undulating flight, "per-*chic*-o-ree, per-*chic*-o-ree." **Yellow Warbler.**

68. YELLOW WARBLER. 5 in.

(Dendroica æstiva. 652.)

Yellow all over shading to olive on back; orange-brown streaks on breast; female not so yellow and less streaked; song, penetrating and unceasing; nests in Lincoln Park. **American Goldfinch.**

69. KINGBIRD. 8½ in.

(Tyrannus tyrannus. 444.)

Dusky black; below white; *tail tipped with broad band of white;* fire-red patch on crown, usually concealed; spreads its tail like a fan when about to alight.

70. BALTIMORE ORIOLE. 7½ in.

(Icterus galbula. 507.)

Bright orange, with black head, throat, back and wings; two white wing-bars; female smaller, brownish-yellow and showing little black; loud call, "co weet', co-weet', co-weet';" song noteworthy. **Orchard Oriole. Scarlet Tanager.**

71. SUMMER TANAGER. 7½ in.

(Piranga rubra. 610.)

Vermillion all over; no black; female yellowish-olive and usually near the male; very rare. **Cardinal.**

72. YELLOW-BELLIED FLYCATCHER 5½ in.

(Empidonax flaviventris. 463.)

Bright olive-green, with dark-brown tail and wings; yellowish wing-bars; sulphur-yellow below, *brightest between legs* and tinged elsewhere with pale olive; yellow eye-ring; call, a soft, slow whistle, "pe'-a." **Yellow-throated Vireo. Least Flycatcher. Pine Warbler.**

73. BLACKBURNIAN WARBLER. 5¼ in.

(Dendroica blackburniæ. 662.)

Black streaked with white; middle of crown, throat and sides of head, *flaming orange*; black patch behind eye; white wing-bars; female duller; usually high up among the leaves. **Prothonotary Warbler.**

74. OVEN-BIRD. 6¼ in.

(Seiurus aurocapillus. 674.)

Olive-green showing yellow tinge; below pure white, thickly spotted; *orange-brown cap* bordered with black stripes; scratches like a hen; tilts tail up and down; under shrubbery; note, "teacher" repeated rapidly with increasing emphasis. **Water-Thrushes.**

75. RED-EYED VIREO. 6 in.

(Vireo olivaceus. 624.)

Olive-green; crown, slaty; white below, lightly tinged on sides; *dark line above a white one over eye;* clear, persistent song; nests in Lincoln Park. **Warbling Vireo.**

76. AMERICAN REDSTART. 5¼ in.

(Setophaga ruticilla. 687.)

♂ Male black, with *six flame-colored spots;* female olive, with *six yellow spots;* spreads its tail like a fan; song, "chee, chee, chee, chew."

77. CAPE MAY WARBLER. 5¼ in.

(Dendroica tigrina. 650.)

Yellowish-olive spotted with black on back; crown very dark; cheeks yellow with an *orange-brown ear patch;* yellow below, black streaks on breast; wing-bars; song all on one note. **Black-throated Green Warbler. Magnolia Warbler.**

78. SCARLET TANAGER. 7¼ in.

(Piranga erythromelas. 608.)

Scarlet, with black wings and tail; female olive-green, usually near by; rather sluggish; note, "chip, chree;" song noteworthy. **Cardinal. Summer Tanagar.**

79. YELLOW-THROATED VIREO. 5½ in.

(Vireo flavifrons. 628.)

Bright olive-green, shading to ashy-blue on rump; *yellow throat* and breast, sharply defined against white belly; line around eye and to the bill, yellow; two white wing-bars; fine song. **Yellow-bellied Flycatcher. Blue-headed Vireo.**

80. ROSE-BREASTED GROSBEAK. 8¼ in.

(Zamelodia ludoviciana. 595.)

Black, including throat, with white rump and wing-patches; breast white with a brilliant rose-red blotch; lining of wings also rose-red; *large beak*; female yellowish-brown, darkly mottled, no red; sluggish; remarkable song.

81. PURPLE MARTIN. 7½ in.

(Progne subis. 611.)

Blue-black all over; female lighter and streaked with grayish-white below; often nests in bird houses; twittering song. **Tree Swallow. Chimney Swift.**

82. YELLOW-BREASTED CHAT. 7¼ in.

(Icteria virens. 683.)

Olive-green; bright yellow below, belly *white;* region about eye black, marked with a white line above eye; white spot and shorter line below eye; the largest warbler; remarkable song. **Dickcissel. Western Yellow-Throat. Yellow-Throated Vireo.**

83. BLACK-THROATED BLUE WARBLER. 5¼ in.

(Dendroica cærulescens. 654.)

Slaty-blue; below white, with black throat and sides; *conspicuous white patch on wing;* female grayish, no black, but may be recognized by *wing patch; hoarse* note, "kree, kree." **Blue-gray Gnatcatcher.**

84. NASHVILLE WARBLER. 4¾ in.

(Helminthophila rubricapilla. 645.)

Olive-green; head and neck bluish gray; indistinct brown patch on crown; *bright yellow below;* no wing bars; *white eye ring;* song, not loud, "wee'-see, wee'-see, wit'-a-wit'-a-wit'." **Tennessee Warbler.**

85. WARBLING VIREO. 5¼ in.

(Vireo gilvus. 627.)

Mouse-gray, with olive rump; white below, tinged with greenish yellow; creamy-white around the eye; song, rippling warble. **Red-eyed Vireo. Least Flycatcher.**

86. BLUE-HEADED VIREO. 5½ in.

(Vireo solitarius. 629.)

Olive-green; *ashy-blue head;* pure white below, sides yellowish; line around the eye and to the bill, white; two white wing-bars; song, noteworthy. **Yellow-throated Vireo.**

87. ORCHARD ORIOLE. 7 in.

(Icterus spurius. 506.)

Male, rich *chestnut-brown* with black head, wings and tail. narrow white wing-bar; female olivaceous above and greenish-yellow below with two white wing-bars; young male like female but with black throat; high trees; loud, clear song. **Baltimore Oriole.**

88. LONG-BILLED MARSH WREN. 5¼ in.

(Telmatodytes palustris. 725.)

Brown, almost black on head, tail and between shoulders, the latter streaked with white; barred only on wings and tail; *line over eye* and middle of breast white; *long bill;* spluttering song. **Other Wrens.**

89. BAY-BREASTED WARBLER. 5½ in.

(Dendroica castanea. 660.)

Ashy-brown, black-streaked; black cheeks and forehead; throat, upper part of breast, sides and crown, *rich chestnut brown;* white wing-bars. **Chestnut-sided Warbler.**

90. PARULA WARBLER. 4½ in.

(Compsothlypis americana. 648.)

Grayish-blue, *yellowish across the back;* throat and breast yellow, latter crossed by brownish band; wing-bars; peculiar song. **Blue Golden-winged Warbler.**

91. WOOD PEWEE. 6¼ in.

(Contopus virens. 461.)

Dark olive-brown; brownish black on wings and tail; frowsy head; below white, showing olive tinge on sides; two narrow white wing-bars; plaintive note repeated slowly and often, "pee'to-way', pee'-to-way', hee'-rue." **Phoebe. Least Flycatcher.**

92. BOBOLINK. 7½ in.

(Dolichonyx orizivorus. 494.)

Male black with light back, creamy buff on neck; female, sparrow colored, streaked above; long merry musical song; open fields; in Lincoln Park usually seen in flocks flying overhead, singing on the wing.

93. BLUE GOLDEN-WINGED WARBLER. 5 in.

(Helminthophila chrysoptera. 642.)

Blue-gray; crown and *patch on wing*, golden yellow; *throat*, and stripe through eye, *black;* white below; song, drawling "zee, zee, zee, zee." **Parula Warbler.**

94. INDIGO BUNTING. 5¼ in.

(Cyanospiza cyanea. 598.)

Indigo blue; wings and tail blackish; female brown; in flocks; often feeds in the grass; noteworthy song. **Bluebird.**

95. PROTHONOTARY WARBLER. 5¼ in.

(Prothonotaria citrea. 637.)

Entire head, neck and breast, *bright orange yellow;* blue-gray wings, rump and tail; female duller; prefers shrubbery near water. **Blackburnian Warbler. Summer Warbler.**

96. TENNESSEE WARBLER. 4½ in.

(Helminthophila peregrina. 647.)

Olive-green, brightest on rump; head and neck, blue gray; *dull white below;* faint white line over eye; no wing-bars; song, shrill and feeble. **Nashville Warbler.**

97. MOURNING WARBLER. 5½ in.

(Geothlypis philadelphia. 679.)

Bright olive-green; head, neck, throat and upper part of breast, *bluish ash;* yellow belly; black band on breast: about bushes and in the grass; noteworthy song. **Connecticut Warbler.**

98. CHESTNUT-SIDED WARBLER. 5 in.

(Dendroica pennsylvanica. 659.)

Back shows black streaks mixed with olive-green; yellow cap; white below with dainty *chestnut markings* on *sides of breast;* song, "chee, chee, chee, chee'ar." **Bay-Breasted Warbler.**

99. WHIP-POOR-WILL. 9¼ in.

(Antrostomus vociferus. 417.)

Mottled, strongly resembling the bark of certain trees; narrow white band across upper part of breast; big head; in daytime lies *motionless, lengthwise a branch.* **Nighthawk.**

100. CERULEAN WARBLER. 4½ in.

(Dendroica cærulea. 658.)

Azure-blue, marked with black on back and sides of head; white below, streaked with blue; two white wing-bars; frequents tree-tops; song resembles that of *Parula.* **Blue-gray Gnatcatcher.**

101. HOODED WARBLER. 5½ in.

(Wilsonia mitrata. 684.)

Olive-green; yellow below; head, neck and upper breast, black; *yellow "mask" across forehead and cheeks;* white spots on tail; female less black. **Western Yellow-throat. Wilson Black-cap Warbler. Canadian Warbler.**

102. BLACK-POLL WARBLER. 5½ in.

(Dendroica striata. 661.)

Streaked black and white; *black crown;* white cheeks; below white with line of black spots down sides; tree-tops; song, a staccato musical "chink" repeated rapidly. **Black and White Creeper.**

103. YELLOW-BILLED CUCKOO. 12¼ in.

(Coccyzus americanus. 387.)

Bronzy olive-gray; white below; *lower half of curved bill yellow* tipped with black; outer tail-feathers black tipped *broadly* with white; wings show a *reddish-brown tinge in flight;* glides stealthily from tree to tree and keeps concealed among the leaves; slowly droops and raises its tail when perching; song, loud "kuk-kuk, kuk-kuk." **Black-billed Cuckoo. Mourning Dove.**

104. CANADIAN WARBLER. 5½ in.

(Wilsonia canadensis. 686.)

Bluish-lead color; yellow below with a necklace of black spots; no wing-bars; noteworthy song. **Magnolia Warbler.**

105. WILSON BLACK-CAP WARBLER. 4¾ in.

(Wilsonia pusilla. 685.)

Bright olive-green; yellow below; *black cap;* in low bushes. **Pine Warbler. Female Western Yellow-throat.**

106. LINCOLN SPARROW. 5¾ in.

(Melospiza lincolni. 583.)

Finely streaked with black and brown; white beneath, with *broad buff band* across the breast and down the sides; narrow streaks on throat, upper breast and sides; dark stripe on each side of throat from corner of mouth; very shy. **Song and Swamp Sparrows.**

107. RUBY-THROATED HUMMING-BIRD. 3¼ in.

(Trochilus colubris. 428.)

Iridescent green and purple; male has ruby-red throat; frequents flowering shrubs and plants; darts here and there and poises in mid air with wings vibrating so rapidly that they make a humming noise; "squeaky note."

108. NIGHTHAWK. 9½ in.

(Chordeiles virginianus. 420.)

On the wing overhead after insects just before or at dusk; long, pointed wings *showing a white patch;* flight resembles that of *Chimney Swift;* sharp note, "skeep;" often nests on the flat roofs of city buildings **Whip-poor-will.**

109. BLACK-BILLED CUCKOO. 12 in.

(Coccyzus erythrophthalmus. 388.)

Bronzy olive-gray; white below; bill *entirely* black; *only a little white* on tail; movements like those of *Yellow-billed Cuckoo;* song, soft "coo-coo, coo-coo." **Yellow-billed Cuckoo. Mourning Dove.**

110. GRAY-CHEEKED THRUSH. 7½ in.

(Hylocichla aliciae. 757.)

Uniform olive; below white, *very palely* suffused with buff; cheeks *gray tinged;* breast and sides of throat, spotted; usually silent in Lincoln Park. **Olive-backed and other Thrushes.**

111. YELLOW-HEADED BLACKBIRD. 10¼ in.

(Xanthocephalus xanthocephalus. 497.)

Black; head, throat and breast, *yellow;* white wing patch; female dark brown, yellow markings duller, no wing patch; female smaller than male.

112. DICKCISSEL. 6 in.

(Spiza americana. 604.)

Streaked; ashy on head and neck; white chin; *black throat patch; yellow breast;* white belly; *line over eye, yellow;* wings show chestnut brown; female has less yellow and no throat patch. **Yellow-breasted Chat. Meadowlark.**

113. CONNECTICUT WARBLER. 5½ in.

(Geothlypis agilis. 678.)

Olive-green; head ashy with throat darker; *white ring* around eye; belly yellow; wings long and pointed; low bushes and swampy places; penetrating call-note. **Mourning Warbler.**

114. RED BELLIED WOODPECKER. 9½ in.

(Centurus carolinus. 409.)

Black and white, back, wings and tail *barred transversely* and very evenly; below grayish-white, *tinged with red;* top of head and back of neck crimson; female, crown gray; rare. **Red-headed Woodpecker. Hairy Woodpecker.**

Table of Occurrence.

In this table the birds are arranged according to the order of their comparative frequency or rarity, based upon personal observations in *Lincoln Park*. The abundance of the birds—that is, the number of individual birds of different species—is in no wise shown, but simply the relative representation of each species. For instance, out of a total of 454 mornings, covering observations during six years, the *Robin* was seen on 383 different mornings.

The record for 1902, during the absence of the authors, is that of Mr. H. V. Bozell.

		NUMBER OF MORNINGS SEEN IN LINCOLN PARK.						
		1898	1899	1900	1901	1902	1903	Total
1	Robin	62	52	57	69	61	82	383
2	Bronzed Grackle	57	58	57	60	57	72	361
3	Blue Jay	49	58	61	65	40	51	324
4	Cowbird	41	34	44	44	39	54	256
5	Junco	33	35	32	32	51	42	225
6	Towhee	35	18	24	44	45	48	214
7	Song Sparrow	27	33	19	38	37	36	190
8	Flicker	29	18	21	33	37	46	184
9	Ruby-crowned Kinglet	31	28	23	30	22	39	173
10	White-throated Sparrow	30	23	23	31	26	35	168
11	Bluebird	26	1	7	31	35	50	150
12	Wilson Thrush	34	35	23	21	11	20	144
13	Yellow-bellied Sapsucker	23	12	15	30	27	34	141
14	Yellow Warbler	27	30	24	18	13	27	139
15	Belted Kingfisher	25	21	24	27	21	19	137
16	Redheaded Woodpecker	23	23	16	26	16	26	130
17	Myrtle Warbler	19	25	11	21	22	31	129
18	Brown Thrasher	27	8	20	21	16	29	121
19	Brown Creeper	18	15	19	14	28	27	121
20	Catbird	22	27	16	17	10	17	109
21	Golden-crowned Kinglet	18	14	13	26	15	23	109
22	Chipping Sparrow	25	11	11	12	17	32	108
23	American Goldfinch	21	19	12	20	5	18	95
24	Tree Swallow	13	11	16	19	13	22	94
25	American Redstart	18	16	19	8	10	20	91
26	Barn Swallow	15	14	10	19	14	19	91
27	Fox Sparrow	11	9	14	9	27	21	91
28	Chimney Swift	16	11	14	15	11	22	89
29	Blue-gray Gnatcatcher	18	16	11	10	16	17	88
30	White-crowned Sparrow	9	5	18	22	16	17	87
31	Palm Warbler	8	21	7	11	19	20	86
32	Hermit Trush	13	9	10	18	9	27	86
33	Black and White Creeper	15	15	11	13	12	18	84
34	Least Flycatcher	18	18	8	14	7	18	83
35	Magnolia Warbler	11	13	13	5	16	20	80
36	Black-throated Blue Warbler	12	14	9	13	12	16	76
37	Olive-backed Thrush	8	4	14	16	11	23	76
38	Phoebe	15	4	5	16	15	19	74
39	Baltimore Oriole	18	6	10	15	11	13	73
40	Grinnell Water Thrush	17	6	9	14	8	17	71
41	Field Sparrow	....	2	12	17	23	17	71
42	Swamp Sparrow	4	4	14	12	17	17	68
43	Crow	4	11	7	11	16	18	67
44	Chestnut-sided Warbler	11	6	11	13	9	16	66
45	Ovenbird	9	11	11	12	11	11	65
46	White-breasted Nuthatch	12	6	17	21	6	2	64
47	Western Yellow-throat	18	17	10	8	3	15	61
48	Wood Pewee	12	14	9	6	7	13	61
49	Downy Woodpecker	14	7	4	8	17	10	60
50	House Wren	1	....	10	11	13	24	59
51	Red-eyed Vireo	13	10	5	6	6	16	56
52	Loggerhead Shrike	5	1	16	13	7	13	55
53	Indigo Bunting	12	17	2	6	5	11	53
54	Black-throated Green Warbler	4	9	4	9	6	12	44
55	Blackburnian Warbler	11	4	9	7	5	6	42
56	Black-poll Warbler	6	7	8	3	3	15	42
57	Kingbird	8	1	5	3	6	17	40
58	Scarlet Tanager	7	3	7	4	3	10	34
59	Ruby-throated Hummingbird	7	9	4	3	1	10	34

		NUMBER OF MORNINGS SEEN IN LINCOLN PARK.						
		1898	1899	1900	1901	1902	1903	Total
60	Mourning Dove	5	3	6	10	2	8	34
61	Rose-breasted Grosbeak	5	2	6	8	6	6	33
62	Tree Sparrow	....	....	10	3	12	8	33
63	Winter Wren	3	5	11	...	3	10	32
64	Meadowlark	3	...	7	13	5	4	32
65	Purple Martin	1	....	.. .	6	4	20	31
66	Cape May Warbler	3	2	9	2	6	7	29
67	Warbling Vireo	7	1	4	3	4	10	29
68	Mourning Warbler	5	8	2	4	4	5	28
69	Wilson Black-cap Warbler	9	1	3	2	5	8	28
70	Yellow-billed Cuckoo	8	7	1	3	1	7	27
71	Great-crested Flycatcher	5	2	....	1	10	9	27
72	Bobolink	2	...	9	10	1	4	26
73	Canadian Warbler	8	3	6	4	1	4	26
74	Red-winged Blackbird	4	....	2	8	3	7	24
75	Wood Thrush	8	3	...	5	3	3	22
76	Orchard Oriole	4	3	5	1	1	6	20
77	Red-breasted Nuthatch	....	....	10	....	3	7	20
78	Marsh Hawk	....	2	1	8	5	4	20
79	Hairy Woodpecker	3	1	4	....	4	7	19
80	Bay-breasted Warbler	1	1	2	1	4	10	19
81	Parula Warbler	6	....	....	2	9	2	19
82	Chickadee	3	...	7	8	...	....	18
83	Pine Warbler	....	....	3	1	5	9	18
84	Henslow Sparrow	3	2	1	2	3	6	17
85	Nashville Warbler	1	1	4	1	....	9	16
86	Yellow-throated Vireo	2	....	2	2	3	7	16
87	Cedar Waxwing	6	5	....	1	2	1	15
88	Purple Finch	4	....	4	....	1	5	14
89	Vesper Sparrow	....	....	6	...	4	3	13
90	Blue-headed Vireo	....	....	2	1	6	4	13
91	Gray-cheeked Thrush	....	....	....	....	3	10	13
92	American Sparrow Hawk	1	1	....	4	2	4	12
93	Yellow-bellied Flycatcher	....	....	5	....	2	4	11
94	Nighthawk	....	2	1	1	....	7	11
95	Lincoln Sparrow	....	....	1	....	1	8	10
96	Black-billed Cuckoo	....	1	2	2	2	2	9
97	Rusty Blackbird	....	2	....	3	....	2	7
98	Yellow-breasted Chat	....	....	....	....	1	6	7
99	Long-billed Marsh Wren	1	2	....	....	....	3	6
100	Louisiana Water Thrush	....	....	1	....	3	2	6
101	Prothonotary Warbler	....	1	....	....	3	1	5
102	Savanna Sparrow	....	....	....	....	....	5	5
103	Blue Golden-winged Warbler	1	....	1	1	1	....	4
104	Whip-poor-will	1	1	...	1	....	1	4
105	Connecticut Warbler	....	....	....	....	....	3	3
106	Dickcissel	....	....	....	1	2	...	3
107	Tennessee Warbler	2	..	....	....	....	....	2
108	Mockingbird	....	....	....	2	....	....	2
109	Cerulean Warbler	....	...	1	....	1	..	2
110	Summer Tanager	....	1	....	....	.. .	...	1
111	Cardinal	....	....	1	...	...	....	1
112	Red bellied Woodpecker	1	...	....	....	...	...	1
113	Hooded Warbler	....	.. .	....	....	....	1	1
114	Yellow-headed Blackbird	....	...	....	1	....	..	1
	Total number of days	66	77	74	78	72	87	454
	Av'ge number of kinds seen daily	18 83	12.75	14. 59	16. 23	16.45	19. 53	16.34

Table of Arrival.

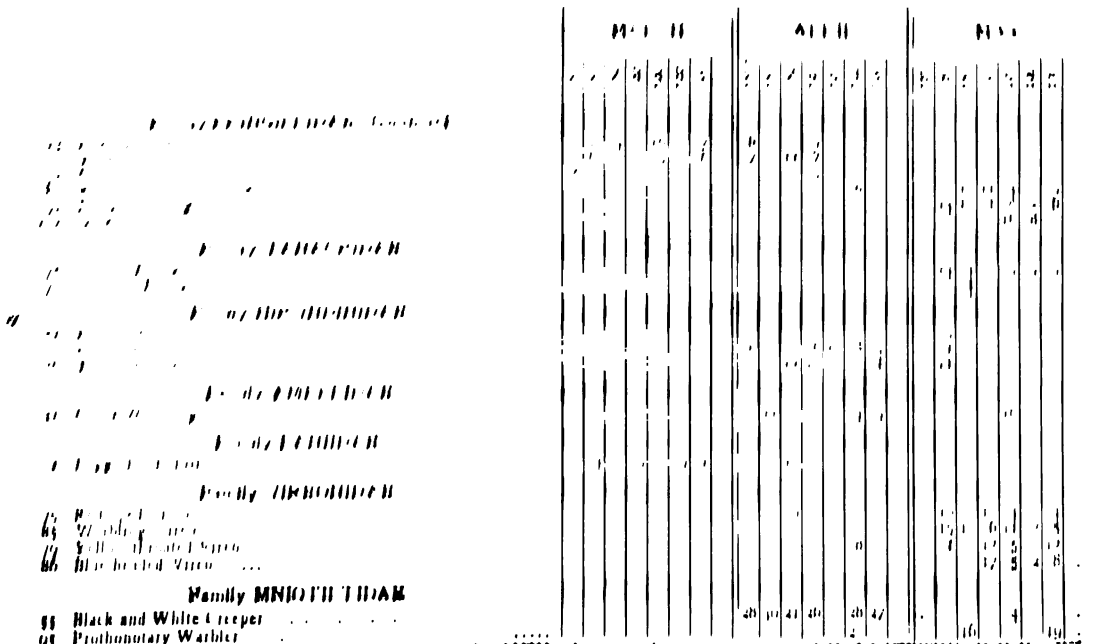
NOTE.—The following table gives the dates of the first arrival of each bird mentioned in the preceding list of one hundred and fourteen for the seven years from 1897 to 1903 inclusive, *as observed in Lincoln Park.* The birds are arranged in their respective families, and space is left for recording their first appearance in any succeeding year.

The record for 1902, in the absence of the authors, was kept by Mr. Harold V. Bozell.

Attention is called to the fact that many birds which are common summer residents in the neighboring country are rare migrants in the Park. Among these may be mentioned the *Red-winged Blackbird, Bobolink and Warbling Vireo.* Some fine singers also, for example, the *Vesper Sparrow, Yellow-throated Vireo* and *Hermit Thrush,* are usually silent in the Park.

		MARCH							APRIL							MAY						
		1897	1898	1899	1900	1901	1902	1903	1897	1898	1899	1900	1901	1902	1903	1897	1898	1899	1900	1901	1902	1903
	Family COLUMBIDAE																					
35	Mourning Dove	..	..	25	..	..	..	..	..	..	..	6	10	26	1	..	9	..	..	..	..	..
	Family FALCONIDAE																					
33	Marsh Hawk	..	..	..	..	25	..	..	..	..	25	19	..	21	1	..	..	..	..	..	..	..
43	Sparrow Hawk	..	..	..	..	24	21	..	..	..	25	18	..	..	30	..	18	..	..	..	..	..
	Family CUCULIDAE																					
103	Yellow-billed Cuckoo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	1	16	17	17	12
109	Black-billed Cuckoo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	12	15	16	12
	Family ALCEDINIDAE																					
22	Belted Kingfisher	28	25	22	..	26	..	..	..	..	..	10	..	11	10	..	..	..	..	..	..	..
	Family PICIDAE																					
29	Hairy Woodpecker	..	..	..	..	..	25	6	..	..	11	..	19	..	..	..	..	24	..	..	..	..
16	Downy Woodpecker	..	..	27	..	..	10	6	..	7	8	..	25	5	..	..	..	..	..	..	..	..
23	Yellow-bellied Sapsucker	..	30	..	..	19	27	..	..	25	..	8	6	..	1	..	..	..	..	..	..	..
114	Red-bellied Woodpecker	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	..	..	..	..	..
57	Red-headed Woodpecker	..	..	..	..	..	..	..	..	26	29	28	..	27	27	28	..	..	..	6	..	..
18	Flicker	..	25	..	..	23	24	18	..	15	..	11	7	..	..	..	..	..	..	..	..	..
	Family CAPRIMULGIDAE																					
99	Whip-poor-will	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	21	..	..	9	..	17
108	Nighthawk	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	18	18	18
	Family MICROPODIDAE																					
59	Chimney Swift	..	..	..	..	..	..	..	..	30	..	30	17	22	..	..	1	..	11	..	..	5
	Family TROCHILIDAE																					
107	Ruby-throated Hummingbird	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	9	13	16	17	13

	Family TYRANNIDAE																								
69	Kingbird									29	30				21					10	6	10		5	
61	Great crested Flycatcher											30			21	29			3			11			
14	Phoebe		20			18	15	17		7		17	1												
91	Wood Pewee									27					28				19	10	11	16		12	
72	Yellow-bellied Flycatcher												29										1	12	
63	Least Flycatcher										30	20	30		21			12				6		9	
	Family CORVIDAE																								
1	Blue Jay																								
6	Crow		9	26	12	3	6	8																	
	Family ICTERIDAE																								
92	Bobolink																		14		8	4	12	8	
11	Cowbird		16			19	1	14		4		10	1												
111	Yellow-headed Blackbird																					17			
27	Red-winged Blackbird					22	26	17					18						7						
5	Meadowlark		14		27	19	10	13																	
87	Orchard Oriole																		15	6	11	10	2	5	
70	Baltimore Oriole										30									2	6	4	2	5	
24	Rusty Blackbird							17					19	5											
9	Bronzed Grackle	29	14	20	24	23	10	14																	
	Family FRINGILLIDAE																								
40	Purple Finch										24		15		11	15									
67	American Goldfinch									25		28		30					6		7		2	7	
37	Vesper Sparrow												22		18	1									
8	Savanna Sparrow							19																	
50	Henslow Sparrow										29	26	21	30	24	15									
4S	White-crowned Sparrow						11					29		20		29		5	9		2				
32	White-throated Sparrow						24	21		26	13	19	21	17											
12	Tree Sparrow						7	13					6	5											
34	Chipping Sparrow									15	13	18	8	8	13	12									
25	Field Sparrow						11	19				23	17	5											
4	Junco	28	9	14	23	18	8	13																	
10	Song Sparrow		15	19	27	18	8	12		8															
106	Lincoln Sparrow																				10	23	12	10	
39	Swamp Sparrow						11					20	21	18		12			7						



Family MNIOTILTIDAE

99 Black and White Creeper . . . . . .
99 Prothonotary Warbler . . . . . .

93	Blue Golden-winged Warbler																		14		12	12	2		
54	Nashville Warbler																		10	4	9	19	2	1	
96	Tennessee Warbler																		11						
90	Parula Warbler																		11			12	3	9	
77	Cape May Warbler																		13	1	2	5	2	9	
68	Yellow Warbler										30	29	30			29		11				6	2		
83	Black-throated Blue Warbler																	11	11	4	8	5	2	5	
38	Myrtle Warbler									14	16	14	19	14	17	8									
66	Magnolia Warbler									26		27			21				11		8	6		5	
100	Cerulean Warbler																				12				
98	Chestnut-sided Warbler																	21	10	30	3	7	2	9	
89	Bay-breasted Warbler														22				20	4	11	15		9	
102	Black-poll Warbler																		19	10	13	16	12	6	
73	Blackburnian Warbler												28		28	30		12	10	3		10			
56	Black-throated Green Warbler									18		23	27	26	28				17					2	
53	Pine Warbler												26	30	21	22									
49	Palm Warbler										29	20	27	26	21	22									
74	Oven-bird																	11	1	3	5	5	1	6	
51	Grinnell Water Thrush										30	28	23	17	21	29									
62	Louisiana Water Thrush														27									5	
113	Connecticut Warbler																							20	
97	Mourning Warbler																		20	13	6	16	2	11	
65	Western Yellow-throat									26		28							1		5	5	2	1	
82	Yellow breasted Chat																						2	11	
101	Hooded Warbler																							12	
105	Wilson Black-cap Warbler																	21	6	22	10	16	3	17	
104	Canadian Warbler																		19	16	12	16	6	12	
76	American Redstart											28						11	1		11	6	2	5	
	Family TROGLODYTIDAE																								
58	Mockingbird													29											
52	Catbird						26			26		28	30	28					1					5	
45	Brown Thrasher									26	24	27	16	24	22	12									
46	House Wren									14		30		21	23	12			4						
36	Winter Wren					22				8	25	30			19	8									
88	Long-billed Marsh Wren							29			14		12												
	Family CERTHIIDAE																								
19	Brown Creeper						21	18		7	7	6	2	4											

		MARCH							APRIL							MAY						
		1897	1898	1899	1900	1901	1902	1903	1897	1898	1899	1900	1901	1902	1903	1897	1898	1899	1900	1901	1902	1903
	Family PARIDAE																					
21	White-breasted Nuthatch	..	29	..	..	18	31	..	7	..	11	2	..	..	2	..	..	..	..	..	..	..
54	Red-breasted Nuthatch	..	..	..	..	..	..	..	..	..	..	..	..	22	28	..	..	..	..	3	..	..
20	Chickadee	..	..	..	19	..	..	..	..	1	..	..	13	..	..	..	..	..	..	..	..	..
	Family SYLVIIDAE																					
17	Golden-crowned Kinglet	..	14	..	..	..	28	19	7	..	11	6	5	..	..	..	..	..	..	..	..	..
28	Ruby crowned Kinglet	..	..	..	..	..	..	19	14	1	13	7	17	13	..	..	..	..	..	..	..	..
47	Blue-gray Gnatcatcher	..	..	..	..	..	..	..	..	25	22	18	28	22	25	..	..	..	..	..	..	..
	Family TURDIDAE																					
64	Wood Thrush	..	..	..	..	..	..	..	18	..	..	..	..	29	..	..	..	3	1	..	4	..	12	..
42	Wilson Thrush	..	..	..	..	..	..	..	..	10	12	7	11	26	8	..	11	..	..	..	..	..	..	..
110	Gray-cheeked Thrush	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21	11	..	..
60	Olive-backed Thrush	..	..	..	..	..	..	..	..	..	..	..	30	22	29	..	..	1	4	8	..	..	..	..
26	Hermit Thrush	..	31	..	..	..	..	19	..	..	11	7	5	13	..	..	..	..	..	..	..	..	..	..
3	Robin	28	9	14	24	14	10	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	Bluebird	28	8	..	31	17	7	7	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..

WATER AND SHORE BIRDS.

General Hints.

The *Loon* and *Grebes* are common representatives of the order of Diving Birds. Their legs are set far back on the body, making it difficult for them to walk at all.

Grebes look like small, tailless ducks. They have long, slender necks, short wings, smooth glossy plumage and flat, lobed feet. They rarely leave the water and can dive or sink out of sight instantly when disturbed, swimming to a distance with only the tip of the bill out of water.

Loons are very large, with flat, heavy bodies, short tails and long, tapering bills. They are never crested, but are conspicuously marked, and are equally expert with the grebes in diving and sinking.

Gulls and *Terns* belong to the order of the *Long-winged Swimmers*, but are better described by the name of *Skimmers*.

Terns are much slenderer and usually smaller than gulls, have very pointed bills and wings, and forked tails. They rarely if ever swim, but skim swallow-like over the water, bill downward, plunging into the water for their prey.

Gulls are plumper than terns, with heavier bills and tails usually even. They do not dive or plunge suddenly into the water, but fly and soar or float about on the surface, sitting well up out of the water.

Ducks, Geese and Swans have webbed feet and short legs, and in walking carry themselves almost horizontal. As a rule they have very strong wings, enabling them to fly long distances at great speed. Our ducks are most easily remembered in three groups:—

1. **The fish-eating Mergansers,** whose plumage is largely black and white and which have saw-edged bills and, usually, conspicuous crests.

2. **The Sea Ducks,** which are conspicuously marked but plainly colored, frequent open water or the sea coast, diving, often to great depths, for their food. Descriptions are given of the *Lesser Scaup, Red head, Canvas-back, American Golden-eye, Old Squaw and Bufflehead.*

3. **The River Ducks,** which have broad, rounded bills, are much variegated in color and markings, and have a peculiar habit of feeding head downwards, as though standing on their heads with the body tipped up. The *Teals, Mallard, Wood Duck* and *Pintail* belong to this group. The females of these ducks, though differing noticeably in size, may easily be confused.

Geese are larger than ducks, feed mostly on land and are usually seen during migration flying at a height in regular ranks after a leader.

Herons and *Bitterns* belong among the *Wading Birds.* They have long, pointed bills, long legs, loose, baggy plumage, broad wings and long necks, curved s shaped in flight.

Herons are tall, crested birds, with very long legs, bills and necks and small tails. Their notes are harsh and squawking. Large numbers sometimes nest together.

Bitterns have shorter legs, necks and bills than herons and are very rarely crested. They utter hoarse, resounding calls, and are ordinarily solitary in habit.

Rails and Coots are known as *Marsh Birds*, although the latter are fine swimmers.

Rails as a rule are smaller than bitterns and frequent grassy marshes where they steal stealthily about, effectively concealed by their dull streaky plumage. Short turned-up tails, short wings and long legs are noticeable characteristics of these rapid runners.

Coots are ducklike in appearance and smoothly plumaged. Lobed feet enable them to swim easily. Their bills spread out at the base in the form of a plate or shield which extends up on to the forehead.

Plover, Sandpipers and the *Woodcock* are strikingly different representatives of the great order of *Shore Birds*. The plover family have stout, short bills, while the sandpipers and woodcock belong to a family which have soft probing bills of greatly varying length, for obtaining their food in soft mud.

Sandpipers have pointed wings, are dull-colored, and are usually found slipping gracefully along the water's edge in search of food. They skim rapidly over the water on outspread wings, and their clear, reed-like notes are distinctly musical.

Plover are small and plump, with long pointed wings, short necks and rather flat heads. They run and fly very rapidly, generally in flocks piping loudly but sweetly. They frequent the inland as well as the shore.

Shore and *Water Birds* are often extremely shy and they can detect the presence of an observer at a distance. The caution is therefore emphasized to approach them slowly and quietly.

Particular Hints.

NOTE:—Owing to a lack of sufficient data the following *Shore* and *Water Birds* are arranged according to the American Ornithologist's Union order instead of their average first appearance. They have all been seen, however, in Lincoln Park by the authors.

115. HORNED GREBE. 14 in.

(Colymbus auritus. 3.)

Brownish, sooty black, extending in narrow line up *back of neck;* rest of neck, sides and upper breast rich chestnut-brown; *silky* white below; head and chin deep black, set off by buffy "horns" or crests, which slant abruptly backwards from the eyes; black bill, tipped with yellow; eye, red. WINTER PLUMAGE: Black parts sooty; brown replaced by white; grayer below; crests and ruff less conspicuous. **Pied-billed Grebe.**

116. PIED-BILLED GREBE. 13½ in.

(Podilymbus podiceps. 6.)

Brownish-black, showing gray on head and neck; belly, dusky white, otherwise brownish below; black throat-patch and a conspicuous black band across bill. WINTER PLUMAGE: Throat whitish; browner below; no band on bill. **Horned Grebe.**

117. LOON. 33 in.

(Gavia imber. 7.)

Black, showing greenish on head and neck, spotted with square or oval patches of white on back and wings and striped with white in front of wings; white below; two conspicuous white-striped bars across the black neck give the effect of a *broad black collar;* tail, very short; eye, red; large black bill, long and pointed; dives and sinks like the *Grebes;* note, an eerie, prolonged cry.

118. AMERICAN HERRING GULL. 24 in.

(Larus argentatus smithsonianus. 51a.)

White; wings and back, pearly blue-gray; bill yellow, showing a small vermillion spot on either side; the longest wing-feathers are partly black, marked and *tipped with white*; the closed wing therefore shows black towards the end, marked with a regular line of white spots and tipped with white at the extreme point; eyelids, bright yellow; looks large and heavy in flight. WINTER PLUMAGE: Streaked on head and neck with gray. IMMATURE PLUMAGE: Dark and much streaked with brownish; bill darker. **Ring-billed Gull.**

119. RING-BILLED GULL. 19 in.

(Larus delawarensis. 54.)

Similar to the *American Herring Gull*, but *smaller*; bill, greenish-yellow, bright at tip, *banded with black around the middle*; wing tipped at extreme point with black; feet greenish-yellow; eyelids vermillion-red. **American Herring Gull.**

120. BONAPARTE GULL. 13 in.

(Larus philadelphia. 60.)

Back and wings, light pearl-gray; head and throat, dark slate color; back of head, neck, underparts and square tail, white; wings tipped, and *bordered narrowly on the outside edge with black*; feet and legs, red; bill black. WINTER PLUMAGE: Hood, grayish white. Large flocks seen in Lincoln Park. **Common Tern.**

121. COMMON TERN. 15 in.

(Sterna hirundo. 70.)

Pearly gray back and wings, whiter on rump; *top of head, shining black*; pure white on throat; dusky-white below; tail forked, *outer edge darkest;* bill long and red, blackening towards tip; feet reddish. WINTER PLUMAGE: Front of head and under-parts, white; bill nearly black. **Bonaparte Gull.**

122. AMERICAN MERGANSER. 25 in.

(Merganser americanus. 129.)

Black; rump and tail, ashy gray; head, throat and upper part of neck, greenish black; wing, *largely white*, edged with black and crossed by a black bar; white below, extending around the neck in a narrow collar; long red bill tipped with black; eye, red; shows salmon tinge below in flight. FEMALE: Ashy-gray, with sharply defined brown head and neck and a pale salmon or brownish tinge across upper breast; *throat, white;* wings largely dark with a white patch; small crest on back of neck; feet orange; eye yellow; rare; "pursues and catches food under water." **American Golden-eye. Red-breasted Merganser.**

123. RED-BREASTED MERGANSER. 22 in.

(Merganser serrator. 130.)

Long ragged crest; head and neck black; broad white collar; broad cinnamon band streaked with black across the breast, otherwise white below, showing salmon tinge in flight; wing largely white, edged and barred twice with black; eye and bill, red. FEMALE: Back and wings dark gray turning to brown on head and neck; much paler on sides of neck and throat and gray across breast; crest, less prominent; white wing-patch; common. **American Merganser.**

124. HOODED MERGANSER. 18 in.

(Lophodytes cucullatus. 131.)

Black, including throat and neck; large, circular crest, white, bordered with black; white below running up in front of the wings in two points; sides brownish, finely lined with black; white wing-patch, crossed by black bar; also lengthwise white streaks on end of wings; *short* black bill; eye yellow. FEMALE: Grayish-brown; throat white; crest small; sides unmarked. **Buffle-head.**

125. MALLARD. 23 in.

(Anas boschas. 132.)

Head, throat and neck glossy green; *narrow* white collar; breast, rich brown; back, dark brownish; underparts, silver-gray; tail white, set off by black feathers which curl up from either side of the black rump; wing-patch purple, bordered on either side with a black and then a white bar. FEMALE: Buffy-brown and black; much streaked and speckled; lighter on throat; shows wing-patch as in male; common.

126. GREEN-WINGED TEAL. 14½ in.

(Nettion carolinensis. 139.)

Gray, finely lined on sides and shoulders with black; *white bar in front of wing;* head, including throat, brown with a broad green stripe from eye to back of head, ending in a small tuft; wings, gray-brown with brilliant green and black wing-patch, bordered by buffy bars; breast very pale reddish-brown, speckled with round black spots; buffy patches on sides of tail; white belly. FEMALE: Mottled brown; top of head and back of neck dark brown; sides of head and neck buff-colored and finely streaked; throat buff, unmarked; no green on head nor white bar in front of wings; wing-patch as in male, but smaller. **Blue-winged Teal.**

127. BLUE-WINGED TEAL. 15 in.

(Querquedula discors. 140.)

Back and underparts thickly mottled brownish and black, lightest below; head slaty, showing purplish gloss; a conspicuous crescent-shaped white stripe in front of eye; *shows blue* on bend of wing, followed by a white bar and a bright green wing-patch; white patch on sides of tail; bill black. FEMALE: Dusky-brown; black on top of head; streaked and whitish on neck and sides of head; throat and about base of bill, *white;* back and underparts, mottled and spotted; wing shows blue but no green; white bars on head are wanting. **Green-winged Teal.**

128. PINTAIL. 27 in.

(Dafila acuta. 143.)

Head, including throat, brown, darkest on top; long, swan-like neck, black above, finely waved white and dusky on back and sides; *long middle tail feathers,* black; white below with a conspicuous curved white stripe running up sides of neck to head and ending in a point; bronzy patch on wings. FEMALE: Tail much shorter but pointed; dusky, everywhere streaked; no white stripe on neck; whitish wing-bars; smaller than male. **Old-squaw.**

129. WOOD DUCK. 18 in.

(Aix sponsa. 144.)

Highly variegated; long, smooth, glossy crest, showing green and purple iridescence and marked by two very narrow white parallel lines, curving from bill and behind eye almost to end of crest; throat white, extending irregularly in two stripes, one up behind eye, the other nearly around neck; breast, glossy brown, spotted with white and set off on either side by a conspicuous white stripe bordered with black; wings highly iridescent, marked by green patch bordered with white. FEMALE: Much duller and less conspicuously marked; head brownish-gray, slightly crested showing greenish tints; throat and line extending from it around base of bill, with space about eye, white.

130. REDHEAD. 20 in.

(Aythya americana. 146.)

Puffy head and *upper* part of neck and throat, bright reddish brown; breast and upper part of back with rump, *black;* belly white; middle back and *sides* evenly and finely waved black and white, *which shows gray at a distance.* FEMALE: Grayish-brown, almost white on throat; brown on head, light brown on neck. **Canvas-back.**

131. LESSER SCAUP DUCK. 16 in.

(Aythya affinis. 149.)

Head, neck and breast black, showing *purple* reflections on head; back black and white, very narrowly barred; upper parts of wings dark, finely mottled with white; lower part of wing brownish-black, showing a small white patch; lower breast and belly white; bill, bluish, tipped with black. FEMALE: Black replaced by brown, lighter on head; region around bill white. **Female Redhead,** easily confused with female Lesser Scaup.

132. AMERICAN GOLDEN-EYE. 19 in.

(Clangula americana. 151.)

Black, glossed with green; white below, extending around the neck in a collar; head bunchy, slightly crested and marked *below eye* and just back of eye by a nearly oval *white spot*; wings largely white; short bill. FEMALE: Brown, snuff-colored on head; white collar; white wing patch; band of bluish gray across breast and down sides. **American Merganser.**

133. BUFFLE-HEAD. 15 in.

(Charitonetta albeola. 153.)

Head, throat and upper neck, iridescent black; conspicuous black crest broadly banded with white over head from eye to eye; back black, ashy on tail; wings black with a very large white patch; *collar and entire under parts, white.* FEMALE: Smaller; brownish, lighter below with no crest and only a white patch on cheeks and a small white wing patch. **Hooded Merganser.**

134. OLD-SQUAW. 21 in.

(Harelda hiemalis. 154.)

WINTER PLUMAGE: Back, long tail-feathers and breast with conspicuous *patch on sides of neck,* black; throat and upper breast, top of head, neck and belly, white; cheeks grayish-brown; wings black and gray; bill crossed by yellowish band. FEMALE: Dark brown, lighter on head, grayish on tail; throat, breast and region about the eye, gray-white; below white, brown on lower part of throat; no long tail-feathers; smaller than male. SUMMER PLUMAGE: Head and neck, dusky black; grayish-white on sides of head, and female shows more brown. **Pintail.**

135. CANADA GOOSE. 40 in.

(Branta canadensis. 172.)

Head and neck, black with white throat-patch extending up to and just behind eye; brownish-gray marked with lighter, darkest on back; rump and tail, black above and white below; fly after a leader in harrow-shaped ranks, often high up, crying, "honk, honk, honk."

136. AMERICAN BITTERN. 30 in.

(Botaurus lentiginosus. 190.)

Streaky tawny- and dark-brown; tawny-yellowish below, mixed with white and streaked with dark brown; conspicuous black streak on sides of neck; short brown tail; breast feathers loose and baggy; yellow eye; call, loud resounding squawk or booming notes which have given it the common name of "stake-driver."

137. LEAST BITTERN. 13 in.

(Ardetta exilis. 191.)

Crown, with back, tail and upper half of wings, shining greenish-black; rest of wing shows buff and bright chestnut; throat and baggy breast, whitish, shading into yellowish-brown on sides of neck, and chestnut on back of neck; buffy white below; tufts of dark feathers on either side of breast; yellow eye. **Green Heron.**

138. GREEN HERON. 17 in.

(Butorides virescens. 201.)

Wings and back dark green, latter tinged with blue-gray; crown, greenish-black; neck and breast, rich reddish brown; throat and line down middle of neck to breast whitish, ending in light streaks on breast; the smallest heron; carries neck curved in flight; squawking note, "scow." **Least Bittern.**

139. SORA. 8½ in.

(Porzana carolina. 214.)

Olive-brown with lengthwise markings of black and some white; short tail turned up, showing buffy white underside; sides *barred* posteriorily with white; front of head and *throat, black;* slaty line over eye; sides of neck and breast, grayish slate; bill *short and yellowish;* legs long. YOUNG: No black; throat whitish and brown on breast; very stealthy; skulks and crouches in grass.

140. AMERICAN COOT. 15 in.

(Fulica americana. 221.)

Smooth blackish slate color, lighter below and black on head and neck; white bill shows *dark marks near the tip;* turned up tail; white underneath; wing edged with white; eye red; young show white below and no marks on bill; toes with scalloped edges. May be mistaken for a small duck.

141. AMERICAN WOODCOCK. 10½ in.

(Philohela minor. 228.)

Black, mixed black and rusty slate; below reddish-brown, no markings; *large* head with short neck and *very long straight bill;* eye set *high up and far back;* crown barred crosswise with black and rusty; short tail; burrows in soft mud for earthworms; nocturnal.

142. SEMI-PALMATED SANDPIPER. 6 in.

(Ereunetes pusillus. 246.)

Grayish-brown, marked with black and buffy; rump very dark; tail tapering; underparts *pure white,* slightly tinged and streaked across breast; white line over eye and dusky line beneath; note, "peep-peep." **Other Sandpipers.**

143. SOLITARY SANDPIPER. 8½ in.

(Helodromas solitarius. 256.)

Back, dusky olive-brown, *finely spotted with white;* crown and back of neck showing dark streaks; white below, throat unmarked; sides of head and neck with breast slightly buffy and *distinctly streaked;* sides lightly barred; wings dark brown with one narrow white wing-bar; middle of tail very dark· outer feathers *white, barred with black;* note, a soft whistle. **Spotted Sandpiper.**

144. SPOTTED SANDPIPER. 7½ in.

(Actitis macularia. 263.)

Greenish-ash marked lightly with black; *long white line over eye;* pure white below everywhere with dark round spots; wings brownish, marked broadly with white bar; flies close close to the water with wings full-spread, showing white wing-bar; note, penetrating "pee-weet, weet;" walks with tilting motion. **Solitary Sandpiper.**

145. KILLDEER. 10 in.

(Oxyechus vociferus. 273.)

Gray-brown; rump rusty-brown; tail rather long; white below; white collar followed by a black collar, and a *black band across breast;* forehead, line over eye and wing-bar, white; bill black; runs very swiftly; note, loud and persistent "kill-dee" often heard high overhead.

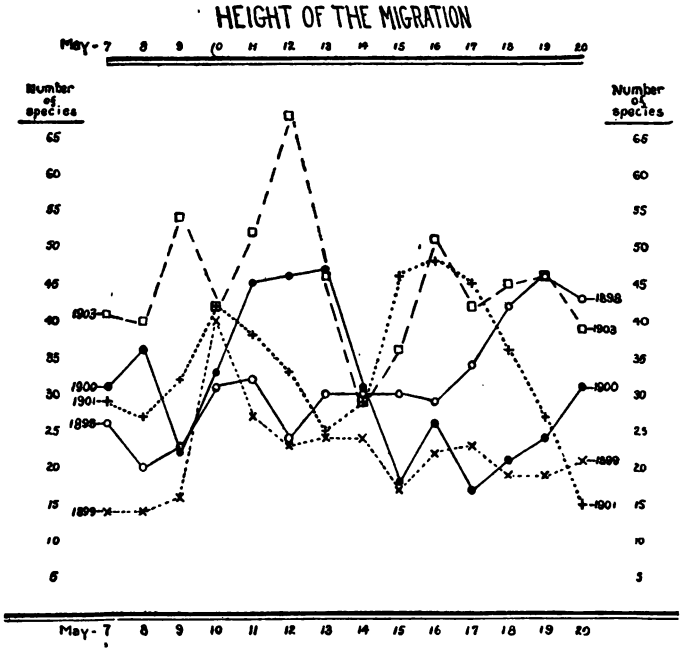
Explanation of Chart.

The "height of the migration" usually comes during the second or third week in May. This chart makes a comparison of the observations of six years graphic.

For instance, the largest number of different species seen on any one morning in 1903 was 68 (May 12), while in 1901 it was 48 (May 16).

The sudden rise or fall in the migration may also be seen at a glance. May 9, 1899, for example, only 16 different species were observed and May 10 the record was 40. Similarly, in 1901, the number of species seen May 17 dropped from 45 to 15 in three days.

A chart showing the number of different kinds of birds seen in LINCOLN PARK during the



Note to Key.

In response to many demands, the following simple field-key has been devised, to the end that the beginner may be aided in learning to observe correctly those points about a bird that appear most conspicuous in the field or which are particularly distinctive.

Technical analyses and measurements have not been employed, but instead, the birds are roughly placed in three groups according to size, the Robin and English Sparrow marking respectively the 10-inch and 6-inch lines of division.

The first part of the key deals with *general* differences in color and markings, while the second seeks to emphasize the most noteworthy *special* points which distinguish the different species. Incidentally a few striking peculiarities of bill, wings and tail have been included.

It will readily be seen that a key embracing so little cannot do more than reduce wild guessing to a few reasonable chances in identifying a strange bird. Some practice is of course necessary to enable the student to use the key readily. Its helpfulness will largely depend upon accuracy of observation and a careful application of the points which it suggests.

Shore and water birds have been omitted—first, in order to keep the key as simple as possible; second, because quite full descriptions of these birds are given in the "Particular Hints;" and, third, for the reason that beginners, as a rule, meet with far better success by becoming familiar with the common land birds before attempting the study of water and shore birds.

EXPLANATIONS.

1. The heading, "Dull Colors," includes all shades of gray or olive, very dull dark-brown and black not showing conspicuous iridescence. Birds in this group are very rarely

streaked or spotted, never barred and seldom show any trace of bright colors.

2. To make the key compact and to avoid referring to the index the birds are indicated by their respective numbers as given under "Particular Hints."

3. Females differing greatly *in coloration* from the males are denoted by heavy figures. Differences in markings are taken into account only when the female is particularly obscure or liable to be mistaken for another species.

4. Every bird appears once under the first six general headings, and a few twice, some of which come under apparently contradictory headings in order to cover incomplete as well as complete observations. For example, the *Robin* has a streaked throat and the *Fox Sparrow* an indistinctly streaked back, both inconspicuous points, often overlooked in the field, yet useful if complete observations have been made. Again, the *Yellow-bellied Flycatcher,* though brighter colored than most of its kind, would scarcely be described as having either brilliant or very dull plumage, and is therefore difficult to tabulate exclusively in one place.

HOW TO USE THE KEY.

Two illustrations will most briefly indicate the easiest method of using the key—

Observation: A dull-colored bird of medium size, nearer six inches than ten, much streaked all over, showing nothing distinctive unless a kind of spot on the breast. Turning to the key, pass by "*Bright Colors,*" "*Iridescent*" and "*Dull Colors,*" choosing "*Streaked, Barred or Spotted.*" Not being sure of the size, it may be necessary to try all the birds between "6 and 10 inches," as well as those "less than 6 inches." Before going to so much trouble, however, pass on to "*Under Parts*" and see whether an easier approach can be made there. The sub-heading "Spot or patch on throat, sides, breast or sides of neck" looks comprehensive enough to apply, while in this case it contains fewer examples. Comparing the numbers there given with those under the first heading selected, it is found that only 10 and 23 appear in both places. On looking up 10 and 23 it is found that they refer to the *Song*

Sparrow and *Sapsucker*, two species so widely different in coloration, habits and movements that it ought not to be necessary to study the key further in order to be sure of the bird in question—namely, the *Song Sparrow*.

Observation: A bird in flight, pure white below, without doubt over 10 inches on account of its long tail. Not having seen the general color with any certainty, but being fairly sure of the white breast and long tail, try "Under Parts" first. Only two birds over 10 inches are given under the sub-heading "Pure white or ashy," and these are 103 and 109. Turning to "Tail," both numbers appear under "very long, sometimes keeled or forked," but only 103, the *Yellow-billed Cuckoo*, comes under "Outer tail-feathers conspicuously white or spotted." *If conspicuous tail spots had been seen* the key would have helped to identify the bird, but the key alone cannot make up for lack of observations.

The second illustration may give force to the suggestion that certain birds can be satisfactorily identified only after very careful observation and some further study.

BRIGHT COLORS { STREAKED, BARRED, SPOTTED }	Showing BLUE, blue-gray or bluish-ash Showing RED, chestnut, light or reddish-brown Showing YELLOW, orange or buff Showing conspicuous BLACK markings
BRIGHT COLORS { *NEVER* STREAKED, BARRED, SPOTTED }	Showing BLUE, blue-gray or bluish-ash Showing RED, chestnut, light or reddish-brown Showing YELLOW, orange or buff Showing much BLACK
IRIDESCENT	Showing iridescent black, blue, green or brownish
DULL COLORS	FEW MARKINGS { Sharply defined, Obscure }
NO MARKINGS	
STREAKED, BARRED OR SPOTTED { ON BREAST, BACK OR BOTH }	ABOVE AND BELOW, rarely bright colors PLAIN ABOVE { Heavily streaked or spotted below, Lightly streaked or spotted below } PLAIN BELOW, rarely with one conspicuous spot on breast HIGHLY VARIEGATED
HOOD	
UNDER PARTS	NO MARKINGS { Pure white or ashy, Dull colors, indistinctly shaded } FEW, IF ANY, MARKINGS { Distinctive red, yellow or brown BREAST, BELLY white or yellow, sharply contrasting with breast } DISTINCTIVE MARKINGS { A line of streaks down sides or across breast, Spotted, finely streaked, or throat and middle of belly plain, Bib, collar, or band across breast, Spot or patch on throat, sides, breast, or sides of neck } Noticeably tinged with red, yellow, buff or brownish
BILL	Hooked, or noticeably long and sometimes curved Large and stout, or noticeably short and thick Used for hammering
HEAD	TOP { CRESTED, or red crown-patch displayed at will, Crown conspicuously STRIPED, Distinct CAP, no line over eye, Distinct CAP or crown-patch, with line over, through or back of eye, FOREHEAD showing black, sometimes with bar through eye } SIDES { Conspicuous line over or through eye, Inconspicuous but distinctive line over eye, Conspicuous eye-ring, or black or yellow mask, Distinctively marked or colored on cheeks or sides of head }

10 Inches or more	Between 6 and 10 Inches	Less than 6 Inches
1, 22		38, 66, 100, 104
3, 43, 45	13, 40, 80	76, 89, 98
5	112	49, 56, 66, 68, 73, 77, 104
1, 5, 43	112	38, 56, 66, 73, 76, 77, 89, 98, 104
	7, 44	21, 47, 54, 83, 84, 86, 90, 93, 94, 95, 97, 113
3	7, 15, 27, 31, 41, 57, 71, 78, 87	
III	27, 41, 61, 70, 82, 92	53, 65, 67, 79, 84, 90, 93, 95, 97, 101, 105, 113
III	15, 27, 57, 70, 78, 87, 92	67, 83, 101
9, 35	11, 24, 30, 44, 81	107
35, 58	2, 4, 52, 69, **87**	17, 20, 28, 72, *83*
103, 109, **111**	**11**, 14, **24**, **31**, 75, **78**, **81**, 91	*28*, 59, 63, **67**, 85, **94**, 96
6	**11**, 14, **24**, **71**, 81	59, **65**, 85, **94**
18, **33**, 43	10, 13, 23, **27**, 37, **40**, **80**, **92**, 99, 108	8, 36, 46, 50, 55, 77, 102, 106
43, 45	13, 26, 60, 62, 64, 74, 110	51, 104
33	42, **81**	49, 68, **104**
5	12, 16, 29. 32, 48, 112, 114	19, 25, 34, 39, 88
	80	38, 56, 66, 73, 76, 77, 89, 98, 100
III	11, 57, 70, 87	95, 101
103, 109	16, 29, 30, 48, 69, 75	19, 21, 34, 85
1, 58	2, 14, **24**, **70**, **87**, 91	17, 20, 25, 28, 39, 47, 63, 88, 96
3, 5	7, 44, 82, 112	53, 65, 79, 84, 95, 101, 105
	4, 15, 61, 82	79, 83, 97, 113
	23	38, 66, 73, 98, 100, 102, 104
43	62, 64	50
22	4, 15, 99, 108	56, 83, 89, 90, 100, 101, 106
5, 18	10, 12, 23, 32, 80, 112	76, 93, 97, 107
	23, 40, 60, 114	25, 36, 49, **53**, 54, 72, 86, 106
33, 43, 45, 103, 109	2	19, 88, 107
	11, 31, 40, 80	67
18	16, 23, 29, **57**, 114	
1, 22	31, 41, 61, 69	28
	32, 48, 74	17, 55
	52, 114	20, 21, 67, 89, 102, 105
	12	25, 34, 38, 49, 54, 93, 98
	31, 41	39, 47, 65, 89
5	2, 16, 29, 32, 62, 82, 112	47, 51, 53, 56, 66, **77**, 79, 88
111	24, 78	8, 96, **100**
	60	26, 95, 72, 79, 84, 80, 101, 113
35, 43	110, 114	20, 50, 56, 78, 77, 89, 93, 100, 108

Glossary.

Barred—Marked with transverse lines.

Bib—Whole throat, with upper breast of same color, sharply defined.

Cap—Entire top of head defined by an oval patch of distinct and contrasting color.

Crest—A tuft of feathers carried erect on top or back of head.

Crown-patch—Smaller and less sharply defined than cap.

Hood—Whole head and neck all around of same color.

Mask—Forehead, together with broad stripe through eye, of same color.

Mottled—Colors and markings blended in no distinct patterns.

Patch—An oddly-shaped and conspicuous mark, never round.

Rump—The extreme lower portion of the back next the tail (easily seen in flight).

Spotted—Marked with nearly round spots or one irregular spot.

Streaked—Marked with *longitudinal* lines or streaks.

Variegated—Showing a variety of colors and markings.

Wing-Bar—A line, usually white, running obliquely across wing.

Supplementary List.

NOTE.—Owing to the impossibility of determining what additional species are most likely to stray into a city park, the following list has been made to include certain species known to occur in Cook County, Illinois, some of which are of common occurrence in the vicinity of Chicago but have not yet been seen in Lincoln Park by the authors:

Red-throated Loon (Gavia lumme. 11.)
Glaucous Gull. (Larus glaucus. 42.)
Franklin Gull. (Larus franklinii. 59.)
Forster Tern. (Sterna forsteri. 69.)
Black Tern. (Hydrochelidon nigra surinamensis. 77.)
Shoveller. (Spatula clypeata. 142.)
American Scaup Duck. (Aythya marila. 148.)
Ring-necked Duck. (Aythya collaris. 150.)
Great Blue Heron. (Ardea herodias. 194.)
Black-crowned Night Heron. (Nycticorax nycticorax nævius. 202.)
King Rail. (Rallus elegans. 208.)
Virginia Rail. (Rallus virginianus. (212.)
Wilson Snipe. (Gallinago delicata. 230.)
Pectoral Sandpiper. (Actrodramas maculata. 239.)
Least Sandpiper. (Actrodramas minutilla. 242.)
Greater Yellow-legs. (Totanus melanoleucus. 254.)
Yellow-legs. (Totanus flavipes. 255.)
Bartramian Sandpiper. (Bartramia longicauda. 261.)
Black-bellied Plover. (Squatarola squatarola. 270.)
American Golden Plover. (Charadrius dominicus. 272.)
Sharp-shinned Hawk. (Accipiter velox. 332.)
Cooper Hawk. (Accipiter cooperi. 333.)
Red-tailed Hawk. (Buteo borealis. 337.)
Red-shouldered Hawk. (Buteo lineatus. 339.)
Broad-winged Hawk. (Buteo platypterus. 343.)
American Rough-legged Hawk. (Archibuteo lagopus sancti-johannis. 347a.)
Pigeon Hawk. (Falco columbarius. 357.)
Short-eared Owl. (Asio accipitrinus. 367.)
Barred Owl. (Syrnium varium. 368.)
Saw-whet Owl. (Nyctala acadia. 372.)
Screech Owl. (Megascops asio. 373.)
Acadian Flycatcher. (Empidonax virescens. 465.)

Traill Flycatcher. (Empidonax traillii. 466.)
Prairie Horned Lark. (Otocoris alpestris praticola. 474b.)
Evening Grosbeak. (Hesperiphona vespertina. 514.)
Redpoll. (Acanthis linaria. 528.)
Snowflake. (Passerina nivalis. 534.)
Lapland Longspur. (Calcarius lapponicus. 536.)
Grasshopper Sparrow. (Coturniculus savannarum passerinus. 546.)
Eave Swallow. (Petrochelidon lunifrons. 612.)
Bank Swallow. (Riparia riparia. 616.)
Northern Shrike. (Lanius borealis. 621.)
White-rumped Shrike. (Lanius ludovicianus excubitorides. 622a.)
Philadelphia Vireo. (Vireo philadelphicus. 626.)
White-eyed Vireo. (Vireo noveboracensis. 631.)
Blue-winged Warbler. (Helminthophila pinus. 641.)
Orange-crowned Warbler. (Helminthophila celata. 646.)
Water-Thrush. (Seiurus noveboracensis. 675.)
American Pipit. (Anthus pensilvanicus. 697.)
Short-billed Marsh Wren. (Cistothorus stellaris. 724.)
Tufted Titmouse. (Bæolophus bicolor. 731.)

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COLORED PLATES, 7½x9½ inches in size, of all the birds mentioned in this little book, except numbers 50, 53, 61, 63, 105, 106, 113, 115, 122, 142 and 143, will be sent by the publishers at 2 cents each, or a portfolio of 134 pictures for $2.00. Both book and pictures, if ordered together, $2.25.

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